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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/376,384	08/16/1999	GERSHON BAR-ON	U013169-9	6449

140 7590 04/28/2005

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EXAMINER

HOFFMAN, BRANDON S

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/376,384

Applicant(s)

BAR-ON, GERSHON

Examiner

Brandon S Hoffman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 78,80-82,84-86 and 96-102 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 78,80-82,84-86 and 96-102 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3-21-05
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Claims 78, 80-82, 84-86, and 96-102 are pending in this office action.
2. Applicant's arguments, filed March 21, 2005, have been considered and are persuasive. However, a new ground of rejection is made in view of Nakagawa et al.

Rejections

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 78, 80-82, 84-86, and 96-102 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claims 78, 80-82, 84-86, and 96-102 recites the limitation "the DVD" and "said DVD" in all of the above listed claims. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

7. Claims 78, 81, 82, 96, 98, and 99 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al. (U.S. Patent No. 4,865,321).

Regarding claim 78, Nakagawa et al. teaches a method for protecting access to content recorded on a media recording disk (DVD), comprising:

- Providing a disk security chip on the DVD, said disk security chip managing access to the content of the DVD (fig. 10, ref. num 36);
- Providing a corresponding player security chip in a DVD player which is operative to play the DVD (fig. 10, ref. num 202), said player security chip managing use of a data stream received from the DVD (col. 13, lines 11-14); and
- Providing said disk security chip with a disk key not known to a disk manufacturer (col. 9, lines 57-61 shows chips are assembled by the manufacturer, but not supplied keys, it would stand to reason that the disk key is not known to a disk manufacturer because as more people learn the key, the more prone the key is to compromise. The disk manufacturer does not need to know the key to place the chip on the disk);
- Wherein said disk security chip, after assuring that said DVD player is authentic, sends said DVD player said disk key (col. 11, line 46 through col. 14, line 31 and fig. 13).

Nakagawa et al. does not teach said disk security chip being in wireless communication with said player security chip, but rather a physical connector (fig. 10, ref. num 178) for connecting the disk security chip to the player security chip.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine a wireless connection between the disk security chip and the player security chip, with the method of Nakagawa et al. It would have been obvious for such modifications because at the time of the Nakagawa et al. invention, wireless communication was not a feasible means for communication. As technology advances, other methods of communication develop and are more practical. Wireless communications between a cartridge and the player is not a necessity since there are no moving parts. Once the medium becomes an optical medium, such as a CD or DVD, wireless communications becomes more desirable because of the spinning chip.

Regarding claim 96, Nakagawa et al. teaches a method for protecting access to content recorded on a media recording disk (DVD), comprising:

- Providing a disk security chip on the DVD, said disk security chip managing access to the content of the DVD (fig. 10, ref. num 36);
- Providing a corresponding player security chip in a DVD player which is operative to play the DVD (fig. 10, ref. num 202), said player security chip managing use of a data stream received from the DVD (col. 13, lines 11-14); and

- Wherein said disk security chip, after assuring that said DVD player is authentic, sends said DVD player said disk key (col. 11, line 46 through col. 14, line 31 and fig. 13).

Nakagawa et al. does not teach said disk security chip being in wireless communication with said player security chip, but rather a physical connector (fig. 10, ref. num 178) for connecting the disk security chip to the player security chip.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine a wireless connection between the disk security chip and the player security chip, with the method of Nakagawa et al. It would have been obvious for such modifications because at the time of the Nakagawa et al. invention, wireless communication was not a feasible means for communication. As technology advances, other methods of communication develop and are more practical. Wireless communications between a cartridge and the player is not a necessity since there are no moving parts. Once the medium becomes an optical medium, such as a CD or DVD, wireless communications becomes more desirable because of the spinning chip.

Regarding claims 81 and 98, Nakagawa et al. as modified teaches comprising performing an authentication process between said disk security chip and said player security chip (col. 9, line 62 through col. 10, line 5).

Regarding claims 82 and 99, Nakagawa et al. as modified teaches wherein said authentication process comprises a mutual zero-knowledge interaction authentication process (col. 13, line 15 through col. 14, line 8).

Claims 80, 84, 97, and 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al. (USPN '321) in view of Friedman et al. (U.S. Patent No. 6,240,513).

Regarding claims 80 and 97, Nakagawa et al. as modified teaches all the limitations of claims 78 and 96, respectively, above. However, Nakagawa et al. as modified does not teach comprising encrypting contents of said DVD with a content key.

Friedman et al. teaches comprising encrypting contents of said DVD with a content key (col. 2, lines 59-67).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine encrypting contents of the medium with a content key, as taught by Friedman et al., with the method of Nakagawa et al. It would have been obvious for such modifications because a content key, or session key, allows only the paired devices to encrypt and decrypt the data (see col. 2, lines 59-67 of Friedman et al.).

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Regarding claims 84 and 100, Nakagawa et al. as modified teaches all the limitations of claims 78 and 96, respectively, above. However, Nakagawa et al. as modified does not teach wherein said disk security chip, after assuring that said DVD player is authentic, sends said DVD player said disk key encrypted with said player key.

Friedman et al. teaches wherein said disk security chip, after assuring that said DVD player is authentic, sends said DVD player said disk key encrypted with said player key (col. 4, lines 7-14).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine the disk security chip encrypting the disk key with the player key, then sending the encrypted key to the player, as taught by Friedman et al., with the method of Nakagawa et al. It would have been obvious for such modifications because this is a secure method of sending data to a recipient by using the recipient's public key so that only the recipient can decrypt the data.

Claims 85, 86, 101, and 102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al. (USPN '321) in view of Litman (U.S. Patent No. 5,988,500).

Regarding claims 85 and 101, Nakagawa et al. as modified teaches all the limitations of claims 78 and 96, respectively, above. However, Nakagawa et al. as

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modified does not teach wherein said play security chip verifies legitimacy of said disk key as a function of a geometric property of said DVD.

Litman teaches wherein said play security chip verifies legitimacy of said disk key as a function of a geometric property of said DVD (col. 7, lines 31-51 and col. 17, lines 32-35).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine verifying legitimacy of said disk key as a function of a geometric property of said DVD, as taught by Litman, with the method of Nakagawa et al. It would have been obvious for such modifications because variation of geometry is hard to copy when copying information onto a new disk. This is desirable because the purpose the invention is to prevent copying of data from an optical medium. Litman is from an analogous art because the abstract mentions placing the magnetic elements into a recordable medium, as claimed by applicant.


Regarding claims 86 and 102, the combination of Nakagawa et al. in view of Litman teaches wherein said DVD is a multi-layer DVD and said geometric property is an angle between layers of said DVD (see col. 17, lines 32-35 of Litman).


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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